



Spark Gap

Vol. 38, Issue 11, November 2021 *MARC - Serving Central Indiana Communities for thirty-eight years*

On Our MARC:

This Saturday, November 20, at 8 am we will be holding our monthly MARC meeting at New Hope Church, 5307 W Fairview Rd Greenwood IN 46142 - on Fairview just west of Morgantown Road. We will meet in the Activity Center, which is the room we have used in the past on the lower level.

The guest speaker this month will be Dennis Ciurej, N9IKL, who will talk about Kiwi-SDR.

We will NO LONGER be transmitting audio on the 2M repeater so please plan to attend in person.

See you Saturday.

73,
Tim
WC9G





Birthdays for November

K9ICP – Bruce Tisdale

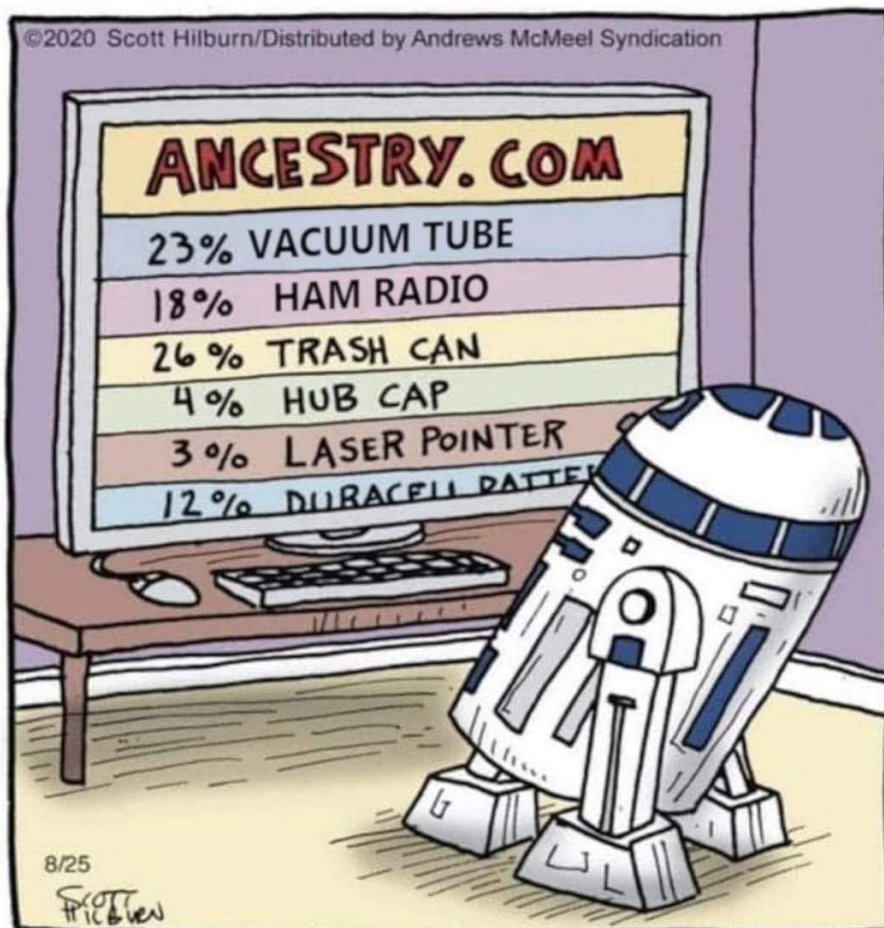
K9DMX – Douglas Corliss

WB9GCV – James Jeffery

WS9H – Rhonda Curtis

W9TEJ – Ron Koons

WC9G – Tim Aldridge



Goblin Patrol was a real treat

For our crew of Mid-State Amateur Radio Club bridge watchers, the mild weather provided a pleasant night to watch for Halloween vandals.

Dave Daily-KB9LOT, ran Net Control from the W9MID radio room. Dave recorded their location, vehicle description and license plate number as each bridge watcher checked into the Goblin Patrol Net. That vital information was passed on to the Johnson county sheriff's dispatch in case anyone called to report a suspicious car on an overpass.



Dave ran the Net using a simplex frequency as the Sunday Night ARES Net was using the repeater at the same time. Dave reported all bridge stations came in full quieting using simplex.

Patrol members reported light traffic at their locations during the evening. Only six club members logged in to cover nine bridges.

We hope to have more volunteers next year as our coverage may expand to include I-65 overpasses and future I-69 bridges through Johnson county.

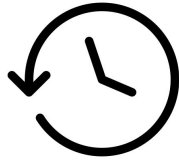
The Pumpkin (Goblin) patrol has been a club activity since the late 80's. Wide spread vandalism to schools, cemeteries, churches and objects thrown from I-65 overpasses on Halloween night prompted then Sheriff Doran Miller to seek help from MARC members.

The bridge watching crews included Tim-WC9G, Chris-KQ9Y, Wilson-KD9FBC, Rhonda WS9H with husband Steve ND9C and Jay AA9YP.

Thanks to everyone who participated in another successful and uneventful Goblin Patrol.

Jack w8ish





Mid-State Amateur Radio Club Inc.
P.O. Box 836
Franklin, IN 46131



2021 November Historian Snapshot

In November as we remember our Veterans let us also remember our Silent Keys.

Silent Keys

The Mid-State Amateur Radio Club remembers our amateur radio operators that have contributed to our hobby and to our club. We have made every effort to include all members of MARC that have passed. If you know of someone we have missed, please let the Historian (historian@midstatehams.org) know so that we may include them here.

If you have additional information about one of our silent keys and the contribution made to the club or to amateur radio, please let us know. We would also like to include pictures of their ham shack, of them operating a station and a copy of any QSL cards they had.

Beam, Louis, N9VKH		Reneau, Dave, AA9KT (N9PPV)
Bohrer, Paul A, W9DUU	Jantzen, Malcom, KB9WMT	Rodenbeck, Louis, WE9M
Cammock, Dan, V9LMN	Keesling, Homer C, WB9OZZ	Rogers, Joe, KF9LQ
Carter, Brenda, KC9WLI	Kemp, Joan, N9DON	Sanders, Isaac (Sandy), WA9RDF
Chambers, Forest, K9FC	Lanham, Luke, KB9WHI	Saylor, Hershel, WD9GMM
Cheeley, John T, W9ELF	Marlin, Ross, N9DZR	Schantz, Jr., Jerry J, W9JJS
Clark, Ernest B, KB9SKI	McCarty, Matt (Mac), NV9K	Scott, Edwin L (Scotty), KB9WCQ
Cook, Lyndal, W9LNX	McClary, Bruce, KA9PWW	Sears, Charles, N9MEW
Coy, Myron Lewis, KC9ODW	Middleton, Del, K9ZON	Siefert, Thomas, WB9RC
Despain, Bob, N9DE	Miles, Kim, N9IS	Soltis, Al, WA9ZET
Francis, Charles W, KB9KDJ	Miles, Tracey, KB9ISD	Thomas, Paul M, KA9DTH
Gill, Vernon, N9QBO	Miller, Don, W9NTP	Voiles, Jack L, AB9AV
Glaam, Robert, W9UGN	Newswanger, Donald, W6NVE	Wendt, David A, KA9OOH
Hagen, Eric L, KC9UIK	O'Connell, Dan, K9VQI	Wendt, Paulette, KB9SRC
Hamilton, Ron, KA9VWR	Osborne, Carol L, KC9CFK	Wright, Jay, KK9L
Hise, Paul, AA9GY	Osborne, Jr., Meredith (JR), KB9HSE	
Hodson, Richard, KL9T	Pyle, Pat, W9PSD	

MARCS UHF REPEATER GETS A LOUDER VOICE!

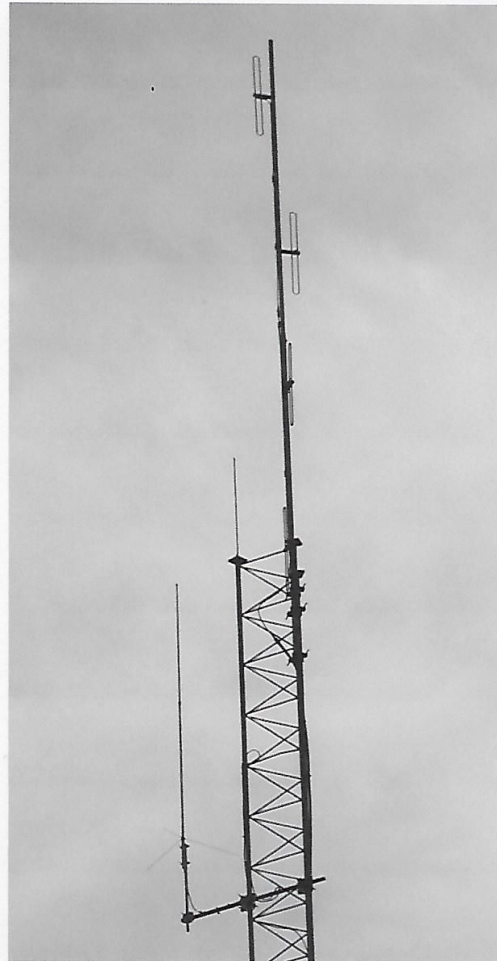
In 1984, Amateur Radio became a reality for Johnson County with the installation of a modest 2M repeater in the backyard of a founding club member. Over the years, the repeater was moved to different locations, each time being an improvement with better equipment, antenna height, or both.

2012 found the repeater being moved to its present location; a 140 foot tower behind White River Fire Department station 51 on Olive Branch Rd in Greenwood.

A new 2M antenna mounted on the top of the tower mated to a new Kenwood TKR-750 repeater with 7/8" Heliac transmission line gave the Mid-State Amateur Radio Club a commanding voice over all of Johnson County and beyond.

At the time of the installation a quick decision by the MARC members present proved to be beneficial in the future. The members realized that this would be an excellent time to install a "backup antenna" side mounted on the tower at 130 feet AGL. A Diamond X-200 dual band was quickly found, hardware purchased from a local store and a reel of RG-8 coax was located to install on the tower at the same time as the 2M system.

In the spring of 2015 MARC members returned from the Dayton, OH Hamfest filled with excitement about a newly announced radio system presented by Yaesu; SYSTEM FUSION, a new concept of DIGITAL communications. A new line of mobile radios for both VHF and UHF, coupled with a frequency agile, dual band capable repeater was available to the Amateur Radio community. A few members shared the information at the next club meeting generating excitement and discussion that resulted in a motion to apply for the clubs first UHF frequency pair, and the purchase of a Yaesu DR-1X repeater. With the dual band antenna and coax already in place on the tower, this should be an easy installation. In June, 2015, MARC went live with a UHF repeater for Johnson County.



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Although a great idea, and a great radio system, the coax proved to be a minor problem due to the 200 foot run from the repeater to the antenna. The loss at 443MHz of RG-8 resulted in the signal just barely covering the county.

In 2018 a donation was made to the club of a reel of new Andrew 7/8" Helix, the crown jewel of transmission line. Discussions and plans immediately ensued for the installation to replace the RG-8. But a health bug called Covid-19 shelved the project for over a year as access to the fire house was cut off.



Finally, as restrictions eased, the project got a fresh push and plans once again were being made. The installation required at least 2 tower climbers to safely perch at the top of the 140' tower, with a ground support team handling the rope work. All while wrangling a wooden reel of over 300 feet of heavy, copper clad Helix.

Sunday, October 31, 2021, the crew gathered at the firehouse. Safety issues were once again gone over. The various "what-ifs" and alternate plans rehashed, and hardhats and gloves were donned.

Approximately 7 hours later a check of VSWR was made on the coaxial jumper from the repeater diplexer to the antenna, the crew agreed that 1.3:1 would "...be OK..." and the W9MID UHF repeater was put on the air with a much more powerful voice.

- Chris Frederick, KQ9Y

Photos: Jacki Frederick, KI6QOG



Tower: Michael "Jet-ski" Andrzejewski Jr., KK4NHY; Mike Rose, KC9WLR

Ropes: Ken Bar, KD9ALA; Chris Frederick, KQ9Y; Wilson Low, KD9FBC; Jim Seiver, WU9Y

Editor: Many thanks to Chris and his crew for completing this project for the UHF repeater. Check it out and make some contacts on it so we can get a good idea on the range of this much improved repeater.



October 2021 Volunteer Monitor Program Report

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service.

- Technician-class operators in Yarmouth Port, Massachusetts, and Richmond, Texas, received *Advisory Notices* after making numerous FT8 contacts on 40 and 20 meters. Technician-class licensees are not allowed to transmit data on 40 meters and have no operating authority on 20 meters.

- Operators in Mims, Florida; Moorefield, West Virginia; State Road, North Carolina, and Grottoes, Virginia, received *Advisory Notices* concerning excessive SSB bandwidth on 40 and 75 meters. The operator in Moorefield, West Virginia, previously received an *Advisory Notice* for out-of-band operation on 7.138 MHz. His case will be referred to the FCC for further enforcement action, which could include removal of voice privileges from, or revocation of, his General-class license.



- An operator in Cave Creek, Arizona, received an *Advisory Notice* for making lengthy transmissions without identifying, as required by Commission rules.

- An operator in Highlandville, Missouri, was reminded that a beacon on 30 meters cannot be automatically controlled, pursuant to 97.203(d) of the Commission's rules, and must have a control operator present at all times of transmission. He was further advised that the FCC may request a schedule of control operators and their duty hours.

The final totals for monitoring in September were 1,909 hours on HF frequencies and 2,716 hours on VHF frequencies and above, for a total of 4,625 hours.

There was one recommendation to the FCC for case closure and renewal of a license, and one request to review a license application. The FCC referred two cases to the VM Program. -- VM Program Administrator Riley Hollingsworth, K4ZDH



CLUB DUES FOR 2022

It is that time of year for your dues for the Mid-State Amateur Radio Club. The dues have been raised to \$25.00 per year as voted on by members present at the November 2021 M.A.R.C. Meeting. The previous amount for dues was not meeting expenses for the year and this is the first dues increase in many years. Please check out the M.A.R.C. website and you may pay your dues via PayPal. This also a good time to update any of your information for club records such as license upgrade, change of address or call sign.

This is also a good opportunity for new amateurs to join our club and join in our club activities for 2022.

Please see Jacki Frederick, KI6QOG
M.A.R.C. Treasurer

The advertisement features a large, stylized graphic of a folded dipole antenna against a background of radiating lines. Below this, the text reads: "The new folded dipole antenna for commercial use...". To the left, there are two graphs: the top one is labeled "DIRECTIVE GAIN" and the bottom one is labeled "SWR". The main heading is "HIGH GAIN DIRECTIVE ANTENNAS for Amateur Use". Below this, a paragraph states: "In vital military and emergency communications all over the world, the name ANDREW means sound engineering plus skill and ingenuity in meeting specific antenna design problems." This is followed by a section titled "NOW FOR AMATEURS" which describes the application of this engineering to commercial antennas. The advertisement also includes a photograph of a physical antenna and a small inset image of a cable. At the bottom left, the company name "ANDREW CO." is prominently displayed along with their address: "363 EAST 72TH STREET CHICAGO 19, ILLINOIS".

THE NEW FOLDED DIPOLE ANTENNA for commercial use... provides the "folded dipole" but without the "folded" part. Consequently, it is a more efficient antenna at lower frequencies than the dipole.

HIGH GAIN DIRECTIVE ANTENNAS
for Amateur Use

In vital military and emergency communications all over the world, the name ANDREW means sound engineering plus skill and ingenuity in meeting specific antenna design problems.

NOW FOR AMATEURS

This engineering skill and know-how with commercial antennas is being applied to the production of home antennas, including both vertically polarized directive arrays and horizontally polarized rotatable systems.

Andrew Co. pioneered in the development of HF antennas, coaxial transmission lines and accessories.

Andrew Co. specializes in the solution of antenna problems—in the designing, engineering and building of antenna equipment.

ANDREW CO.
363 EAST 72TH STREET
CHICAGO 19, ILLINOIS

See 750 1/2" diameter soft lead per copper coaxial cable. Hand-drawn at size of the Andrew cable are now in use with police and military transmitters.

POWERED BY A.C.A.
RECEIVED FROM
RECEIVED BY

1950's Amateur Radio antenna advertisement.



MID-STATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month
at the New Hope Church 5307 West Fairview Road, Greenwood, IN 46143.

See our website, www.midstatehams.org, for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

W9MID Repeater:

146.835/
146.235 MHz
(151.4 Hz PL Tone)

Club Officers:

President: Tim Aldridge - WC9G
Vice President: Rhonda Curtis - WS9H
Secretary: Jim Adams – KB9JMU
Treasurer: Jacki Frederick - KI6QOG
Repeater Trustee - Chris Frederick – KQ9Y

W9MID Repeater:

443.525/
448.525 MHz
(151.4 Hz PL Tone)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

P.O. Box 836
Franklin, Indiana
46131

Spark Gap Editor: Robert LaGrange N9SIU

Please send your articles to my email: n9siu@yahoo.com no later than the 2nd week of the month.



Thanks to the New Hope Church for the use of their building for meetings and testing.